REMARKS

Claims 22-35 have been previously withdrawn and cancelled. Claims 37-41 have been added via the present amendment. The claims remaining in the application are 1-16, 17-21, and 36-41.

Support for new claims 37-41 may be found at various places in the specification including paragraphs [0024] and [0063] of the published application. No new matter has been added.

Rejection Under 35 U.S.C. § 112

The Office Action has rejected claims 1, 3-15, and 16 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. This rejection is respectfully traversed.

The Office Action has objected to the claim 1 limitation "during imaging" citing insufficient support. The Office Action references the following paragraph:

> "The adjustment will generally be made before or after an imaging operation and may be executed during a retrace cycle while the exposure heads are returning to a home position on completion of an image."
> (emphasis added)

The word "generally" indicates that this is but one aspect of the present invention. Other aspects of the present invention support the "during imaging" limitation and are found in paragraphs [0055] and [0056] and Figures 7, 8A, 8B, and 8C. Reading these two paragraphs together, and referring to the Figures, it is clear that "fractionally increasing or decreasing the speed of translation of exposure heads," takes place during imaging. Thus, the limitation for "during imaging" found in claim 1 is in fact supported by the specification.

Claim 36 has been rejected as the Office Action has asserted that the term "during a retrace cycle" implies an opposite of the limitation "during imaging" inherited from the parent claim 1. Claim 36 has been amended to depend from new claim 37. This rejection is respectfully traversed.

Rejection Under 35 U.S.C. § 102

The Office Action has rejected claims 1 and 3 under 102(b) as being anticipated by Gamblin (U.S. 4,131,898). This rejection is respectfully traversed.

The Office Action has rejected claim 1 under 35 U.S.C. 102(b) as being anticipated by Sawano et al. (JP 2000-343779). This rejection is respectfully traversed.

The Office Action has rejected claims 1, 3, 8, and 16 under 35 U.S.C. 102(e) as being anticipated by Okamoto et al. (Pub. No. 2003/0048467). This rejection is respectfully traversed.

The Office Action has rejected claims 1 and 16 under 35 U.S.C. 102(e) as being anticipated by Shibasaki (U.S. 6,938,969). This rejection is respectfully traversed.

There are significant differences between the claims of the present application, as amended, and the references cited in the Office Action. None of the references discloses "an adjustable mechanism for moving the exposure heads relative to each other to change a spacing therebetween while each exposure head is imaging" as recited in currently amended claim 1.

For example, Gamblin mentions that "the printheads (are) adjusted," but gives no mechanism for how the adjustment is made. Reading Gamblin in its entirety, however, with reference to the drawings, shows that the adjustment is made to establish the distance between the printheads, and it appears to be made prior to the printing operation, not while each exposure head is imaging. Once again no indication how these adjustments are made, and with the minimum amount of information presented in drawings and specification it would be impossible to make the adjustment during operation of the printheads during printing as in the claims of the present invention.

As understood by the Applicant, Sawano et al. discloses an expansion copying machine that moves two or more print heads mounted on carriage 26 which are used to image record forms of different sizes along a main scanning direction Hh. Sawano et al. teaches the use of a head spacing modification device that changes the position of each movable head 2b and 2c with respect to carriage 26. The head spacing modification device comprises a ball screw section 33 and rotational mechanical component 31 for movable head

27b, and ball screw section 37 and rotational mechanical component 35 for movable head 27c (see paragraph [0020] and Figure 1). As taught in paragraph [0030], when a record from Pm of large size is to be imaged, print heads 2a, 2b, and 2c are arranged along a continuous line with a mutual pitch spacing of Xm. Therefore, at the time of printing, head carriage 26 only moves a distance Xm under the influence of migration device 29 to scan record form Pm. As taught in paragraph [0034], when a record form Ps of small size to be printed, the ball screws are employed to displace print head 2b top a location where the pitch spacing with print head 2a becomes Xs, and print head 2c is displaced to the location where the pitch spacing with print head 2b becomes Xs. Therefore, as taught in paragraph [0035] the location of moved print heads 2b and 2c are represented by locations 27bs and 27cs with a mutual pitch spacing of each head set to Xs. Therefore, at the time of printing, head carriage 26 only moves a distance Xs under the influence of migration device 29 to scan record form Ps. Accordingly, Sawano et al. does not teach or suggest "an adjustable mechanism for moving the exposure heads relative to each other to change a spacing therebetween while each exposure head is imaging" as recited in currently amended claim 1. Rather, Sawano et al. teaches away from the subject matter of claim 1 by stating in paragraph [0037] that since the operating time of each print head (presumably during imaging) becomes the same, each print head life is equalized. (The machine translation is awkward and difficult to understand in parts.)

Okamoto et al. discloses an image recorder having more than one recording head. The recording heads are moved concurrently during recording (see paragraph [0045]). The spacing between the recording heads may be adjusted before recording by selecting starting positions for the recording heads based on image data (see paragraphs [0046] and [0047]). Accordingly, Okamoto et al. does not teach or suggest "an adjustable mechanism from moving the exposure heads relative to each other to change a spacing therebetween while each exposure head is imaging" as recited in currently amended claim 1.

Shibasaki discloses an image recording method for recording data on a plurality of recording material by a recording head which reciprocates in a direction substantially perpendicular to a conveyance direction of the recording material. Shibasaki teaches in Col. 5, lines 17-24, and Figures 5A to 5C, that "the

heads 34a, 34b move to record or print the image on the print sheet 46" and that "the heads 34a and 34b substantially synchronously move, when the same image (is) printed on the sheets 46a, 46b." Accordingly, Shibasaki does not teach or suggest or teach "an adjustable mechanism for moving the exposure heads relative to each other to change a spacing therebetween while each exposure head is imaging: as recited in currently amended claim 1.

For these reasons, the Applicant submits that amended claim 1 and claims 3-14, which depend from claim 1, are patentable.

For these reasons, the Applicant further submits that amended claim 16, which recites the step of "adjusting a spacing between each of the at least two exposure head while each exposure head is imaging" is patentable along with claims 17-21, which depend from amended claim 16.

Rejection Under 35 U.S.C. § 103

The Office Action has rejected claims 3-7 and 36 under 35 U.S.C. 103(a) as being unpatentable over Sawano et al. in view of Gamblin. This rejection is respectfully traversed.

The Office Action has rejected claims 9-14, 18, and 19 under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. in view of Nakao et al. (U.S. 5,359,434). This rejection is respectfully traversed.

The Office Action has rejected claim 17 under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. in view of Karz (U.S. 5,587,730). This rejection is respectfully traversed.

As discussed above, Sawano et al., Gamblin, and Okamoto et al. fail to teach or suggest adjusting a spacing between the exposure heads "while each exposure head is imaging" as recited in currently amended claims 1 and 16.

Nakao et al. discloses a scanning optical apparatus comprising a semiconductor laser for scanning a surface of a photoconductor. The photoconductor comprises a photosensitive section and a mark section.

Karz discloses a thermal inkjet printer having a primary print head and a secondary print head. The secondary print head may be used to compensate for a failure of the primary print head.

Neither Nakao et al. or Karz teach or suggest adjusting a spacing between the exposure heads "while each exposure head is imaging" as recited in

currently amended claims 1 and 16. For these reasons, the Applicant submits that Sawano et al., Gamblin, Okamoto et al, Nakao et al, and Karz, either alone or in combination, fail to teach or suggest the claim 1 feature of "an adjustable mechanism for moving the exposure heads relative to each other to change a spacing therebetween while each exposure head is imaging" and the claim 16 step of "adjusting a spacing between each of the at least two exposure heads while each exposure head is imaging." Since claims 3-7 and 9-14 depend from currently amended claim 1, and claims 17-21 depend from currently amended claim 16, the Applicant further submits that these claims are also patently distinct over the prior art of record.

New claim 37 recites the feature of "an adjustable mechanism for moving the exposure heads relative to each other to change a spacing therebetween while each imaging head is moving concurrently." The Applicant submits that the new claim 37 and new claims 38 and 39, which depend from claim 37, are patently distinct over the prior art of record. Claim 36 has been amended to depend from claim 37 and is also submitted to be patently distinct.

Allowable Subject Matter

It is noted that the Office Action has allowed claim 2. The Office Action has objected to claim 15 but would allow it if it is rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 15 has been amended accordingly.

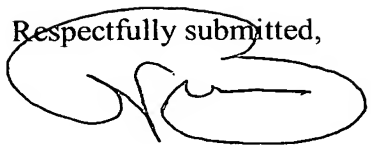
CONCLUSION

Dependent claims not specifically addressed add additional limitations to the independent claims, which have been distinguished from the prior art and are therefore also patentable.

In conclusion, none of the prior art cited by the Office Action discloses the limitations of the claims of the present invention, either individually or in combination. Therefore, it is believed that the claims are allowable.

If the Examiner is of the opinion that additional modifications to the claims are necessary to place the application in condition for allowance, he is invited to contact Applicant's attorney at the number listed below for a telephone interview and Examiner's amendment.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.

Enclosures: Fee Transmittal
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